

Application No. 10/672,491

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Original) A cleaning system for removing residual toner from an imaging surface, comprising:

a primary cleaner for removing the predominant amount of residual toner and debris, such primary cleaner having an operative position;

a blade holder;

an agglomeration cleaning blade mounted in the blade holder at a position downstream from the primary cleaner, said cleaning blade having a cleaning edge; and

a forcing device for moving the blade between a first and a second position wherein the first and second position are selected from the group consisting of an engaged position and a retracted position;

wherein, when the blade is moved into the engaged position, the cleaning edge is supported at a low angle of attack in engagement with the imaging surface at a relatively low load, for shearing release of agglomerations from the imaging surface and wherein the cleaning blade is movable to the retracted position during periods in which the primary cleaner is in its operative position.

2. (Original) The cleaning system of claim 1, further comprising a wiper mechanism wherein, when the blade is moved to the retracted position, the wiper mechanism removes sheared agglomerations from the cleaning edge.

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3. (Original) The cleaning system of **claim 1**, further comprising a catch tray situated to catch agglomerations sheared by the cleaning edge.

4. (Currently Amended) The cleaning system of **claim 1**, wherein the forcing ~~mechanism~~ device is a solenoid.

5. (Currently Amended) The cleaning system of **claim 1**, wherein the forcing ~~mechanism~~ device is a motor.

6. (Original) The cleaning system of **claim 1**, further comprising a biasing mechanism for biasing the blade holder toward an initial position selected from the group consisting of the engaged position and the retracted position.

7. (Original) The cleaning system of **claim 6**, wherein the biasing mechanism comprises a spring.

8. (Original) The cleaning system of **claim 1**, wherein the primary cleaner comprises a rotating electrostatic brush.

9. (Original) The cleaning system of **claim 1**, wherein the blade holder is pivotally mounted and wherein the forcing device causes pivotal motion between the engaged and the retracted positions.

10. (Original) The cleaning system of **claim 1**, wherein the forcing device causes the blade holder to move reciprocally between the engaged and retracted positions.

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11. (Original) The cleaning system of **claim 2**, wherein the wiper mechanism comprises a sponge-like material.

12. (Original) The cleaning system of **claim 2**, wherein the wiper mechanism comprises a wiper blade.

13. (Currently Amended) The cleaning system of **claim 1**, wherein the forcing device exerts its force upon ~~the~~ wiper mechanism and wherein movement of the wiper mechanism causes the cleaning blade to move between the engaged and the retracted positions.

14. (Original) The cleaning system of **claim 1**, wherein the imaging surface has a duty cycle period during which it is imaged and wherein the cleaning blade is moved to the engaged position between about 15 to about 30 percent of the duty cycle period.

15. (Original) The cleaning system of **claim 14**, wherein the cleaning blade is moved to the engaged position about 20 percent of the duty cycle period.

16. (Original) The cleaning system of **claim 1**, wherein the imaging surface comprises a revolving endless loop and wherein the cleaning blade is engaged for less than 2 revolutions in every 6 revolutions.

17. (Original) The cleaning system of **claim 16**, wherein the cleaning blade is engaged during about one revolution in about every 5 revolutions.

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18. (Original) The cleaning system of **claim 1**, wherein the cleaning blade is in the retracted position during non-imaging periods.

19. (Original) The cleaning system of **claim 1**, wherein the cleaning blade is in the retracted position during duty cycle periods in which no copy substrate contacts the imaging surface.

20. (Original) The cleaning system of **claim 1**, wherein the imaging surface is a charge retentive surface and wherein the cleaning system comprises a cleaning system within an electrostatographic imaging system.

21. (Original) A process for cleaning agglomerations from an imaging surface, comprising:

removing the predominate amount of residual toner and debris from the imaging surface by a primary cleaner mechanism;

engaging a cleaning edge of a cleaning blade with the imaging surface at a low angle of attack at a relatively low load for shearing release of agglomerations from the imaging surface;

retracting the cleaning blade from the position in which it is engaged with the imaging surface; and

cleaning the retracting cleaning blade by engaging the cleaning edge with a wiper mechanism.

22. (Currently Amended) The process of **claim 21**, wherein engaging occurs between about 15 and about 30 percent of the ~~a~~ duty cycle period of the imaging surface.

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23. (Currently Amended) The process of **claim 22**, wherein engaging occurs about 20 percent of ~~at~~ the duty cycle of the imaging surface. |

24. (Original) The process of **claim 21**, wherein the imaging surface comprises a revolving endless loop and wherein engaging occurs during less than about 2 revolutions in about every 6 revolutions of the endless loop.

25. (Original) The process of **claim 24**, wherein engaging occurs during about one revolution in about every 5 revolutions.

26. (Original) The process of **claim 21**, wherein engaging is avoided during non-imaging periods.

27. (Original) The process of **claim 21**, wherein engaging is avoided during duty cycle periods in which no copy substrate contacts the imaging surface.